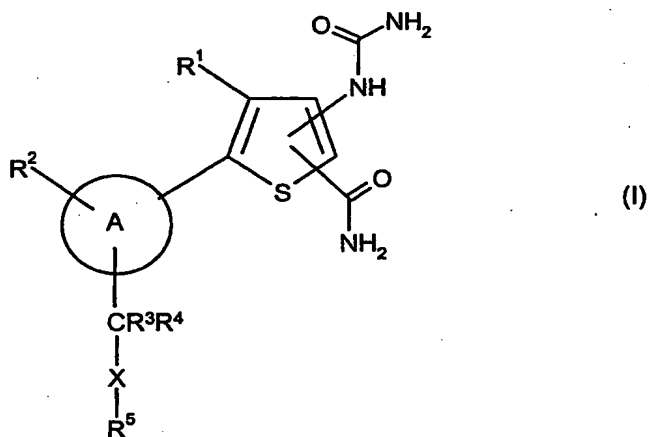


CLAIMS

1. A compound of formula (I)

5



wherein

10 R^1 represents H or CH_3 ;

R^2 represents hydrogen, halogen, cyano, C1 to 2 alkyl, trifluoromethyl or C1 to 2 alkoxy;

R^3 and R^4 independently represent H or CH_3 ;

15

or the group CR^3R^4 together represents a C3 to 6 cycloalkyl ring;

A represents a six-membered aromatic ring optionally incorporating one or two nitrogen atoms; and the group $-CR^3R^4-X-R^5$ is bonded to ring A in the 4-position relative to the

20 thiophene ring;

X represents NR^6 ;

R^5 represents H, C1 to 6 alkyl, C2 to 6 alkenyl or C3 to 6 cycloalkyl; said cycloalkyl group
25 optionally incorporating one heteroatom selected from O, $S(O)_n$ or NR^7 ; said alkyl group

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being optionally further substituted by one or more groups selected independently from CN, OH, C1 to 4 alkoxy, F, a C5 to 10 monocyclic or bicyclic aromatic ring system optionally incorporating one or two heteroatoms independently selected from O, S and N, and said ring system being optionally further substituted by one or more substituents selected independently
5 from halogen, C1 to 2 alkyl, C1 to 2 alkoxy or CF₃; or said alkyl being optionally further substituted by a C5 to 6 cycloalkyl ring that optionally incorporates a heteroatom selected from O, S(O)_m or NR⁸ and/or a carbonyl group and is optionally further substituted by OH;

R⁶ represents H or C1 to 6 alkyl; said alkyl group being optionally further substituted by CN,
10 OH, C1 to 4 alkoxy or one or more fluoro atoms;

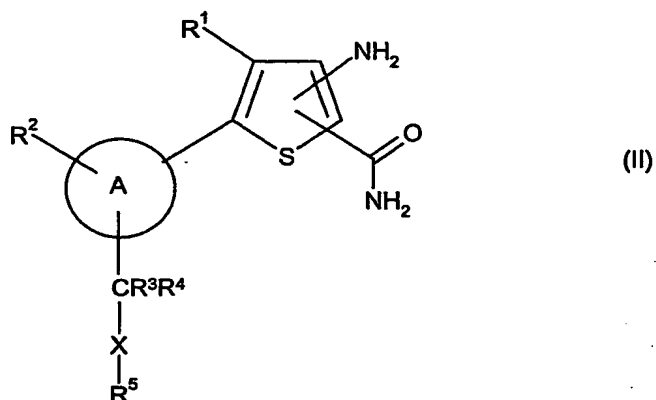
n and m independently represent an integer 0, 1 or 2;

R⁷ and R⁸ independently represent H or C1 to 2 alkyl;
15 and pharmaceutically acceptable salts thereof.

2. A compound of formula (I), according to Claim 1, wherein R¹ represents H.
- 20 3. A compound of formula (I), according to Claim 1 or Claim 2, in which A represents optionally substituted phenyl.
4. A compound of formula (I), according to any one of Claims 1 to 3, in which R³ and R⁴ each represent H.
- 25 5. A process for the preparation of a compound of formula (I), according to any one of Claims 1 to 4, which comprises:

(a) reaction of a compound of formula (II):

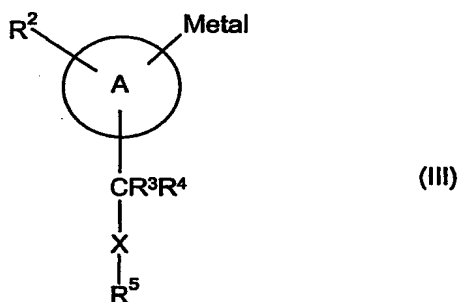
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wherein A, R¹, R², R³, R⁴, R⁵ and X are as defined in Claim 1 with an isocyanate; or

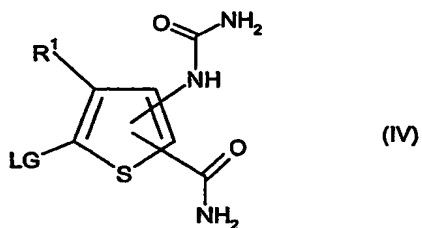
(b) reaction of compound of formula (III)

5



wherein A, R², R³, R⁴, R⁵ and X are as defined in Claim 1,
with a compound of formula (IV)

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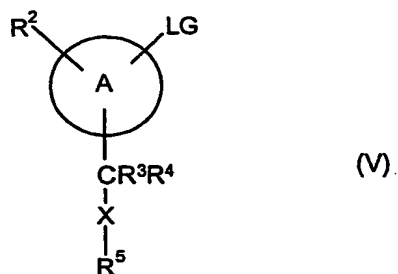


wherein R¹ is as defined in Claim 1 and LG represents a leaving group; or

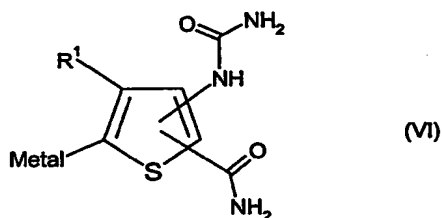
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(c) reaction of compound of formula (V)

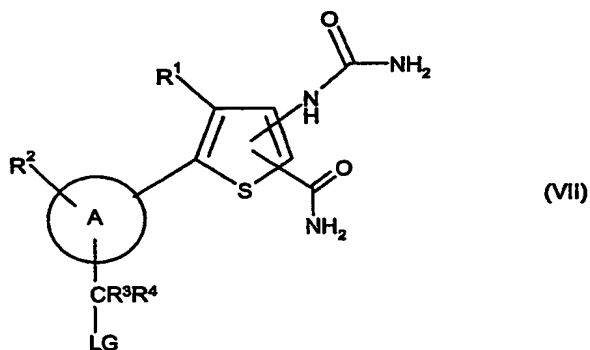
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wherein A, R², R³, R⁴, R⁵ and X are as defined in Claim 1 and LG represents a leaving group,
 5 with a compound of formula (VI)



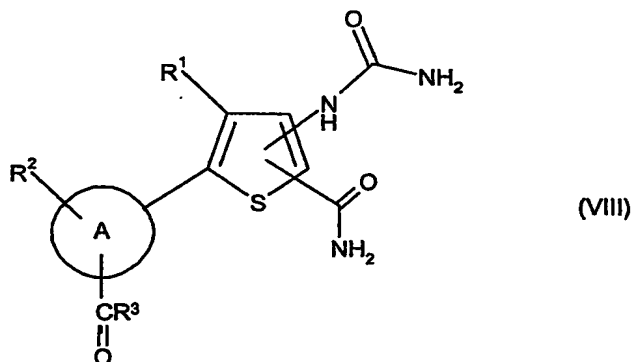
wherein R¹ is as defined in Claim 1; or
 10 (d) reaction of compound of formula (VII)



wherein A, R¹, R², R³ and R⁴ are as defined in Claim 1, and LG represents a leaving group,
 15 with an amine of formula R⁵R⁶NH, wherein R⁵ and R⁶ are as defined in Claim 1; or

(e) reaction of compound of formula (VIII)

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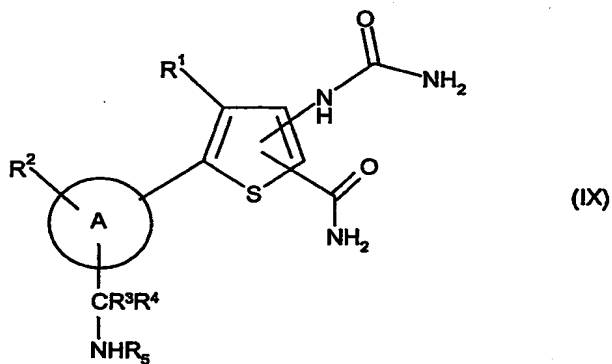


wherein A, R¹, R² and R³ are as defined in Claim 1,

with an amine of formula R⁵R⁶NH wherein R⁵ and R⁶ are as defined in Claim 1, under reductive amination conditions; or

5

(f) reaction of a compound of formula (IX)



wherein R¹, R², R³, R⁴, R⁵ and A are as defined in Claim 1,

10 with an aldehyde or ketone under reductive amination conditions;

and where necessary converting the resultant compound of formula (I), or another salt thereof, into a pharmaceutically acceptable salt thereof; or converting the resultant compound of formula (I) into a further compound of formula (I); and where desired converting the resultant compound

15 of formula (I) into an optical isomer thereof.

6. A pharmaceutical composition comprising a compound of formula (I), or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1 to 4 in association with a pharmaceutically acceptable adjuvant, diluent or carrier.

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7. A pharmaceutical composition adapted for administration by inhalation or insufflation, comprising a compound of formula (I), or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1 to 6 in association with a pharmaceutically acceptable adjuvant, diluent or carrier.
- 5 8. A process for the preparation of a pharmaceutical composition as claimed in Claim 6 which comprises mixing a compound of formula (I), or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1 to 4 with a pharmaceutically acceptable adjuvant, diluent or carrier.
- 10 9. A compound of formula (I), or a pharmaceutically-acceptable salt thereof, as claimed in any one of claims 1 to 4 for use in therapy.
- 15 10. Use of a compound of formula (I), or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1 to 4 in the manufacture of a medicament for use in the treatment or prophylaxis of diseases or conditions in which inhibition of IKK-2 activity is beneficial.
- 20 11. Use of a compound of formula (I), or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1 to 4 in the manufacture of a medicament for use in the treatment or prophylaxis of inflammatory disease.
12. The use as claimed in Claim 11 wherein the disease is rheumatoid arthritis.
- 25 13. The use as claimed in Claim 11 wherein the disease is chronic obstructive pulmonary disease.
14. The use as claimed in Claim 10 wherein the disease is cancer.
- 30 15. A method of treating, or reducing the risk of, diseases or conditions in which inhibition of IKK-2 activity is beneficial which comprises administering to a person suffering from or at risk of said disease or condition a therapeutically effective amount of a compound

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of formula (I), or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1 to 4.